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11 MR. WRENN: I don't know who said if someone
12 hands you a lemon, make lemonade. Quickly, I'll tell
13 you about myself.

14 I have been radioactive for 65 years and I've
15 been in radiation research for over 40. So I don't
16 have quite as much experience as your committee, but
17 it's all in one mind. So I can integrate it probably
18 better than a committee can. I know one of your
19 committee members who I worked with years and years
20 ago, a very good man.

21 Now, I was on a committee of the American
22 Physical Society that studied high-level radioactive
23 waste a quarter of a century ago. We made a lot of
24 recommendations and I have read the DOE reports to see
25 if the site complied with what our recommendations

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1 were, which is that it provided sufficient geochemical
2 and hydrological isolation so that by the time the
3 waste got to people, the radioactive decay reduces it
4 to innocuous levels. And I believe this is the case
5 here.

6 Unfortunately, there is no view graph machine

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7 for me to show you this, but anyone who wants to see
8 it, I'll be happy to mail you a copy. It may show up
9 in the minutes.

10 The bottom line is that the most dangerous
11 materials in this waste are stratum 90 and ZZ 137.
12 They are fission products and have a half life of 30
13 years and a tenth life of about a century. That means
14 over a century, 90 percent of their radioactivity
15 disappears.

16 And the underground hydrology shows that if
17 you assume all the waste canisters fail immediately and
18 the drip shields and the stuff begins to move
19 immediately, that it will not get to the Amargosa
20 Valley before essentially all the stratum 90 and ZZ 137
21 have undergone radioactive decay. Some of the
22 longer-lived activity which is present in much lower
23 amounts radioactive-wise will be present.

24 And for that, I adopted Senator Ensign's
25 views, which are that you should really build a field
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1 processing property located at the site and extract the
2 plutonium and higher actinides, make it in the field to
3 be reburned in nuclear power plants. That will extend

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4 the total fuel in nuclear power plants available from
5 mining that's already occurred by 150 percent, because
6 these reactors are converters, they're not breeders.
7 Breeders make more fuel than they consume but
8 converters make 60 percent of what they consume. You
9 only get that if you reprocess. The argument against
10 that is safeguards. Once you repossess it and the
11 plutonium is cured, someone could steam it and make a
12 nuclear weapon.

13 The French tell me that reactor grade
14 plutonium is not weapons grade plutonium. The French
15 have some great scientists. The argument against
16 having it there in the fuel to be irradiated, since
17 it's not so radioactive with gamma rays, wouldn't kill
18 a terrorist or anybody stealing it.

19 My suggestion is, build a nuclear power plant
20 right there and colocate it. After you extract it,
21 start irradiating it and make it conversion-proof again
22 immediately. That solves two problems at once -- the
23 diversion problem and shortage of electricity in
24 Nevada, which I understand is a problem from reading
25 the Las Vegas Review Journal religiously every day on

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1 the Internet where it's free.

2 I'm looking forward to being radioactive for

3 another at least 20 years because the only time you're

4 not radioactive is when you're dead. That potassium in

5 your body is an essential element. As long as I'm

6 disintegrating about a million times a minute, I know

7 I'm still alive.

8 MODERATOR BROWN: You're right at five

9 minutes. Do you want to end on that happy thought?

10 MR. WRENN: I have a one-sentence summary. I

11 believe that the proposed repository design and

12 location is safe, but could be made safer, and I've

13 outlined how to make it safer -- to remove the

14 long-lived radioactive and reburial it. You don't need

15 to burn any new machines -- they're called nuclear

16 power plants.

17 I want to thank the panel members for sitting

18 through everything they did today. They don't look

19 like a bunch of killers. They look like responsible,

20 thoughtful people to me.

21 MODERATOR BROWN: Do you want to submit your

22 statement for the record?

23 MR. WRENN: Yes. It's the same statement I
24 submitted in Amargosa Valley, but I probably said
25 different things here.

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2 MR. WRENN: Yes, I did, I -- let me get up to
3 the microphone, because my voice is getting hoarse at
4 this time of night.

5 MODERATOR BROWN: Okay, Ed Wrenn.

6 MR. WRENN: The -- there was a very good
7 comment made by a gentleman back there who wants an
8 online, real time environmental radiation monitoring
9 program. And my point is, that one already exists.
10 You can call it up on the internet, anybody in this
11 room can call up and find out what the radiation, gamma
12 radiation levels are at any of 20 DOE stations around
13 the Nevada test site. This program is run by the
14 University of Nevada's Desert Research Institute. And
15 they even have a station here in Pahrump. I visited
16 their station in Beatty, and the Amargosa Valley on my
17 trip up to the Amargosa Valley, and I've also visited ,
18 their website several times, and it's true, it's
19 updated every six hours or so. So you can find out
20 what's going on in real time for the environmental
21 gamma background.

22 The reason I did that was because I wanted
23 my -- I said in my prepared speech that the long-term

24 dose from drinking the water would be equal to about 3

25 percent of the natural background, less than 10

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1 millirems a year. And I went and took the data from

2 the Beatty station and the Amargosa station, which is

3 due to the natural background at each place, and that

4 turns out to be difference of about 47 millirem a year,

5 so by moving from here to Beatty, you could get a much

6 higher radiation dose than you would ever get from

7 drinking the water here 10 million years from now, if

8 the repository goes in. I went longer than I said I

9 would. Sorry. Let me give you this --

10 MODERATOR BROWN: Okay, for the record.

11 MR. WRENN: My last copy. I thought I

12 shouldn't take all the ones at their station, because

13 there might be other visitors show up, would like to

14 read them.

15 MODERATOR BROWN: Okay, great, thanks. Okay,

16 is there anybody else? Dale, I guess you wanted to --

17 UNIDENTIFIED SPEAKER: I just wanted to say,

18 I wanted to see them do the water as well as the air.

19 MODERATOR BROWN: Right. I think this is

20 just partial, and I think you wanted alpha, beta and

21 gamma. So that's on the record.

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22 UNIDENTIFIED SPEAKER: Yes, understanding

23 that alpha at this time is very difficult to do,

24 especially in real time. It's almost impossible. But

25 future technology will get us there.

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1 MODERATOR BROWN: Okay, thanks.

2 MR. WRENN: We can do it, but you're just

3 measuring what nature has got out there, the radon

4 daughters.